UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,086	09/21/2001	Harald Blum	MO6652333671	4679

157 7590 06/12/2002

BAYER CORPORATION
PATENT DEPARTMENT
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER
SERGENT, RABON A

ART UNIT	PAPER NUMBER
1711	5

DATE MAILED: 06/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

T.P

Office Action Summary

Application No.	Applicant(s)
09/937,086	Blum et al.
Examiner	**Art Unit**
Rabon Sergent	1711

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *three* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *23-44* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *23-44* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *3*
4) ☐ Interview Summary (PTO-413) Paper No(s). ____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. Claims 23-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have failed to specify the type (weight average or number average) of the claimed molecular weights.

2. Claims 23-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Components a) and c) are not mutually exclusive when the molecular weight is 500.Components d) and e) are not mutually exclusive. It is unclear if either of a) and c) or d) and e) can each be satisfied by a single component.

3. Claims 26 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have failed to specify a basis for the claimed percent values.

4. Claims 39 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term, "high molecular weight polyurethane", is subjective language. It is unclear what constitutes a high molecular weight.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Gaa et al. ('873).

Patentees disclose polyurethane solutions derived from the reaction of reaction constituents which correspond to applicants' claimed reactants. See abstract

and columns 3-25. Patentees additionally disclose that the polyurethanes may be produced in the form of aqueous dispersions, and that they may be used as coatings for a wide variety of substrates.

7. Claims 24-35 and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa et al. ('873).

As aforementioned, patentees disclose the production of polyurethanes, wherein reactants are used which correspond to applicants' claimed reactants, including monofunctional and polyfunctional alkoxysilanes and active hydrogen containing compounds which further contain hydrophilic groups. Though patentees are largely silent with respect to applicants' claimed percent values, the position is taken that such values are broadly encompassed within the teachings of the reference and that it would have been obvious to tailor the quantities of the components, so as to arrive at the instant invention. It has been held that it is obvious to adjust or manipulate a result effective variable, and the selection of the claimed percent value ranges is considered to fall within the purview of this holding.

8. Claim 36, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa et al. ('873) as applied to claims 24-35 and 37-42 above, and further in view of EP 831,108 and GB 1,474,105.

As aforementioned, the teachings of Gaa et al. are considered to render the subject matter of claims 24-35 and 37-42 *prima facie* obvious; however, the primary reference is silent regarding the aspartate based alkoxysilane component of claim 36 and the use the composition to coat

textiles, as set forth within claims 43 and 44. However, aspartate based alkoxysilanes were known end capping agents for polyurethanes at the time of invention. EP 831,108 disclose that the use of these end capping agents yields polymers having improved elongation and tensile strength. Therefore, it would have been obvious to incorporate these alkoxysilane reactants within the teachings of Gaa et al., so as to arrive at the instant invention. Furthermore, GB 1,474,105 disclose that alkoxysilane polyurethane compositions are useful for treating textiles. See page 1. In view of this disclosure, it would have been obvious to utilize the similar compositions of Gaa et al. as coatings for textiles.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent

June 10, 2002